CROSSOVER

CrossOver 12 Solo
Version 3.1

CONFIGURATION GUIDE

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ROSS
Live Production Technology

CrossOver 12 Solo • Configuration Guide

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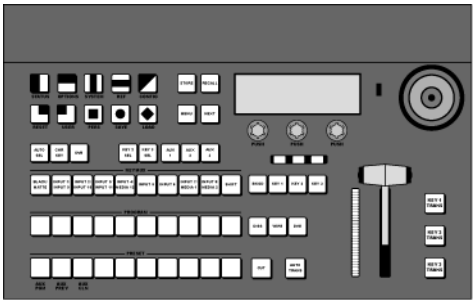


CrossOver 12 Solo

Thank you for considering the purchase of a CrossOver 12 Solo Multi-Definition Live Production Switcher. Each CrossOver 12 Solo is a true multi-definition production switcher and comes fully equipped with support for a wide variety of SD and HD video formats. CrossOver 12 Solo is based on the latest technology in both hardware and software, offering a readiness for the future that is unmatched in the industry. Unlike other products on the market, no costly upgrades are required when moving from SD to HD. All that is required is a simple software setting change. Whether your production is in HD or SD, CrossOver 12 Solo will work for you - right out of the box.

Designed for Live!

CrossOver 12 Solo builds on the Ross Video reputation for designing switchers for live studios, trucks, and post-production. At the center of the action, it is important that the switcher be powerful and versatile, yet maintain its ease of operation. This frees the operator to concentrate on the programming instead of the equipment, delivering a cleaner, more professional production.

Designed for Linear!

The CrossOver 12 Solo switcher continues to build on Ross Video's reputation for setting the standard for multi-definition linear editing suites. The traditional layout and familiar controls of the CrossOver control panel provide the power and ease of use you expect from a Ross switcher.

CrossOver 12 Solo cleanly connects to virtually any editor using the industry standard GVG100/110 protocols.

Designed for You!

With production switchers installed in over 125 countries world-wide, our sales, demonstration, and training people get a lot of ongoing feedback from customers. This feedback is carefully tracked and considered in the design and feature set development of our production switchers. The CrossOver 12 Solo, our seventh generation of switchers, was designed with the direct input of video professionals experienced in news, sports, drama, mobile, and post production. Key members of the CrossOver 12 Solo design team are part of an ongoing program in which they provide switcher demonstrations, assist with switcher installation, and train operators. As a result, the CrossOver 12 Solo line continues to offer our legendary combination of power and ease of use.

Join our Growing Customer Base!

Deciding to purchase a CrossOver 12 Solo switcher will put you in good company, with many thousands of Ross switchers installed worldwide. CrossOver 12 Solo continues to build on a family of multi-definition switchers that have been delivering the goods every day in live sports, stadium scoreboards, and drama productions, as well as local and network newscasts.

Experience Great Support!

Ross Video has designed and manufactured production switchers for over thirty years, with significant year over year growth for the past 18 years. We believe that an important factor of our success is our focus on providing a superior customer experience. We continually benchmark our warranty and technical support to ensure that they are the best in the industry.

We hope that you join the many thousands of satisfied video professionals around the world that are proud owners of Ross production switchers. Please do not hesitate to contact us with any questions or comments you have related to this Configuration Guide at Tel: +1-613-652-4886, Fax: +1-613-652-4425 or email us at solutions@rossvideo.com.

Product Overview

Multi-Definition — Future-proof right out of the box, CrossOver 12 Solo allows you to work in either SD or HD. CrossOver 12 Solo supports 480i (SD 525), 576i (SD 625), 720p, 1080i.

Integrated Up/Down Converters — All CrossOver Live Production Switchers come with four (4) integrated up/down converters with frame synchronizers capable of converting 1080i or 720p to SD. The CrossOver Multi-Definition Live Production Switcher can also convert SD signals to 1080i, or CrossConvert 720p to 1080i.

Incredibly Powerful CrossOver 12 Solo — The CrossOver 12 Solo Live Production Switcher sets a new standard for small compact switcher and chassis capability. It supports 12 Multi-Definition Serial Digital inputs, 3 Multi-Definition Serial Digital Aux Bus outputs, 2 Multi-Definition Serial Digital Program outputs, 1 Multi-Definition Serial Digital Preview output, three Keyers, 2 channels of Animation-Store, with dedicated alphas, with access to 4 Gigabytes of Animation-Store cache, a 2-axis positioner, 2 channels of 2D DVE, 24 GPI I/Os, and a single Reference input with 3 adjustable independent Reference outputs. Add FlexiClean™, Linux OS, and a whole lot more, and the result is nothing short of revolutionary. Amazingly, it fits into a rack-saving 2 RU.

2D DVE — Great for sophisticated looking boxes, it allows preset pattern keys to be zoomed, cropped, and repositioned in 2D space for picture in picture shots, or you can use one of the useful pre-built 2D effects to perform 2D background transitions.

UltraChrome™ Advanced Chroma Keying — Our UltraChrome chroma keyer uses Ross technology to perform detailed keying in the most demanding applications. A single UltraChrome chroma keyer is provided as a standard feature.

4 Channel Animation-Store — Two independent channels of stills with alpha are available switcher-wide, providing 4 Gigabytes of stills, logos, and animation that can be stored and recalled from a USB media drive.

Memory AI — Let CrossOver do the work for you. When you recall a memory that has a source selected for PGM, CrossOver protects your program output and sets up the next transition to take that shot on-air. Never worry about a memory accidentally recalling to program again.

Multi-Viewer — Our broadcast-quality integrated multi-viewer allows you to view ten (10) video sources, including program and preview, from a single output BNC. All sources include mnemonic names and red and green tallies.

Powerful MLE — The Multi-Level Effects (MLE®) of the CrossOver 12 Solo comes standard with fully featured keyers with luma, and linear, plus an advanced UltraChrome chroma keyer. The MLE also has an advanced pattern generator that includes pattern rotation, aspectization, and multiplication. An additional pattern generator is dedicated to complex wash generation.

FlexDevice™ — Need the latest and greatest device support on your switcher, but don't want to upgrade the switcher software yet? FlexDevices separate device control from the version of switcher software by using device specific drivers that are installed into the switcher. Simply download the latest FlexDevice driver for your device, install it onto the switcher, and assign it to a communications port.

FlexCam Robotic Camera System Interface — Pan, tilt, zoom, focus, shot recall and more, are directly controllable from your control panel with these FlexDevice drivers.

Roll Clip Control — Need to co-ordinate the rolling of a video server clip with a transition? Simply select the source button assigned to the video server with Roll Clip enabled. When the next transition is performed, CrossOver sends the play command to the video server so that the clip is playing when the source is taken on-air. Native video server control over the Advanced Media Protocol (AMP) is used. Additionally, for Servers and Clip players that do not support AMP, GPI Outputs can also be used. Roll Clip allows each device to have it's own pre-roll delay assigned so that the transition takes place on the start of each element.

Upgrades from the Web — Software and even some firmware can be upgraded from files that are downloaded from our web site. Download the files, save them on a USB drive, and upgrade the switcher with the new files. It's fast, easy, and it's FREE!

Affordable — A powerful switcher at a great price!

Built to Last — Ross warranties save thousands in operational costs over competitive products. It's no secret that Ross products are tough. They're built to handle years of demanding, continuous use. The CrossOver 12 Solo series is backed by a comprehensive 1-year transferable warranty. The design of our fourth generation fader bars is so good that they are guaranteed for life.

Your purchase decision must be based on a careful look at your present and future programming requirements. To ensure your investment is an informed one, and that the switcher is equipped for your programming needs, Ross Video has put together this Configuration Guide for the CrossOver 12 Solo switchers In this guide, we describe the CrossOver 12 Solo switcher and its many standard and optional features. As you go through the information, please feel free to call us. We will be happy to address any of your questions.

Product Comparison

Use the following table to compare the different switchers in the CrossOver 12 Solo product line.

CrossOver 12 Solo Live Production Switcher

	CrossOver 12 Solo
Control Panel	
Panel Source Buttons	10
Maximum Number of MLEs Supported	1
Legendary Ross Fader Handle with Lifetime Guarantee	Yes
Source and Keyer Mnemonics	No
Positioner	2-Axis
Width × Depth	16”×11” (41cm×28cm)
Redundant Power	Yes (optional)
Video Input/Output	
Multi-Definition HD/SD	Yes
Standard Definition Processing	525, 625
High Definition HD/SD[1]	Yes
SDI Inputs	12
SDI Outputs	6 (2×PGM, 1×PV, 3×AUX)
FlexiClean™ Clean Feed System	Yes
Format Scalar and Frame Sync	4
Input Reference Format[2]	Internal / Black Burst / Tri-Level
Independent Reference Output	3
Multi-Viewer	Yes (10 sources)
Effects Capabilities	
Maximum Simultaneous Keys	3
Internal DVE Channels	2
Memory AI	Yes
UltraChrome™ Chroma Keys	1
Storage and Networking	
USB Media Drive	Yes
Animation-Store Still Store Channels	2/4
Ethernet Connectivity	Yes
Linux OS	Yes

	CrossOver 12 Solo
Animated Logo Players (requires video and alpha playout)	1 or 2 Animation-Stores
Peripheral Interfacing	
OverDrive® Compatible	No
FlexDevice™ Support	FlexCam
Roll Clip Control	AMP and GPI Output
External Link Ports	1
Editor Protocols (GVG)	100
GPI I/Os	24
Tallies	8
USB Ports	1

1. 1080i 50/59.94, 720p 50/59.94, 480i 59.94 (4:3 and 16:9), 576i 50 (4:3 and 16:9)
2. 480i, 576i, 720p, 1080i

Standard Features

➤ Serial Digital Inputs

The CrossOver 12 Solo Multi-Definition Live Production Switcher come standard with 12 Serial Digital inputs.

➤ Serial Digital Outputs

All CrossOver 12 Solo Multi-Definition Live Production Switchers come standard with 6 Serial Digital outputs, consisting of 2 Program, 1 Preview, and 3 Aux outputs.

Every output is fully timed to provide consistent and adjustable output phasing.

➤ Analog Reference Input and Outputs

CrossOver 12 Solo provides you with maximum flexibility and cost effectiveness when choosing the reference signal for your facility by supporting both external and internal refernce sources. The external reference can be an input from a house sync to the single reference input BNC. The internal reference can also be used as a house sync with selectable tri-level sync or analog black burts with independent H/V settings for each of the three reference output BNCs.

Although tri-level sync is recommended as your reference source for all applications, analog black burst can be used when operating the switcher.

See the table in the **Specifications** section, at the end of the Configuration Guide, for detailed reference information.

➤ 4 Channel Animation-Store

Up to four (4) independent channels of still/animations are available switcher-wide. Thousands of full screen stills and logos can be cached and used on the CrossOver 12 Solo Live Production Switcher.

Animation-Store comes standard with 4 Gigabyte of cache on the CrossOver 12 Solo. The number of images cached increases considerably when smaller, non-full screen images like logos are loaded from USB.

➤ MLE Effects System

The MLE® (Multi-Level Effect) system is standard with the CrossOver 12 Solo Live Production Switcher. The MLE provides a keyer, supporting matte fill, pattern mask, box mask, self-key, linear key, and UltraChrome™ advanced chroma key.

A complex wash generator is also provided, that incorporates extensive wash patterns, matte video effects, and noise effects while a full preview is always available to reduce on-air surprises.

➤ Powerful Pattern Generator

The CrossOver 12 Solo Live Production Switcher has a single pattern generator that comes equipped with 10 classic wipes. Most wipes can be rotated, bordered, multiplied, aspectized, and repositioned.

➤ Matte/Wash Generator

The CrossOver 12 Solo Live Production Switcher has a single simple matte generator and complex wash generator capable of multi-color washes. Any one of the color generators can be assigned to MATTE, or wipe pattern edges. An additional color generator is available for an Aux Bus.

➤ 2D DVE

Each CrossOver 12 Solo Live Production Switcher has two channels of advanced 2D DVE engine for performing over the shoulder, or picture in picture shots. This allows preset pattern keys to be zoomed, cropped, and repositioned

horizontally and vertically to create the look you want, or you can use one of the useful pre-built 2D effects to perform 2D background transitions.

➤ UltraChrome Advanced Chroma Keying

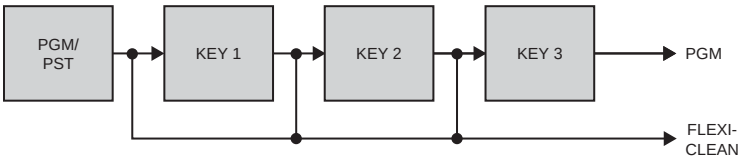
The Ross UltraChrome™ uses advanced video processing technology to provide exceptional blue spill reduction and clean edges, even with difficult source material. Glass, smoke, translucent materials, and natural shadows are handled superbly.

➤ FlexiClean Clean Feed Output

FlexiClean is typically used for bilingual and live-to-tape productions. It provides a second Program output that is derived from a different location than the standard program output. A frequent application is the recording of shows for later airing without call-in phone numbers inserted.

The clean feed output can come from before or between the keyers. The diagram below illustrates the possible clean feed configurations.

Note: The FlexiClean output is only available on one of the three (3) Aux Bus outputs.



Clean Feed Modes — CrossOver 12 Solo

➤ USB Media Drive

This feature makes it possible to store and recall switcher memories, media stills, and animations to a USB media drive. This allows operators and technical staff to back up their memories and easily transfer these settings to other CrossOver 12 Solo Live Production Switchers.

➤ 100 Event Switcher Memory

CrossOver 12 Solo comes standard with storage for 100 complete switcher snapshots. All of these memories can be stored to a USB media drive, providing custom tailored memories for every operator and every show.

➤ Clear and Intuitive Displays and Buttons

CrossOver 12 Solo always lets you know what's going on. A unique glow color can be set for each CrossOver control panel. This color is applied to all the buttons on the control panel.

Red-lit on-air sources allow you to easily identify the sources, and Keys that are on-air.

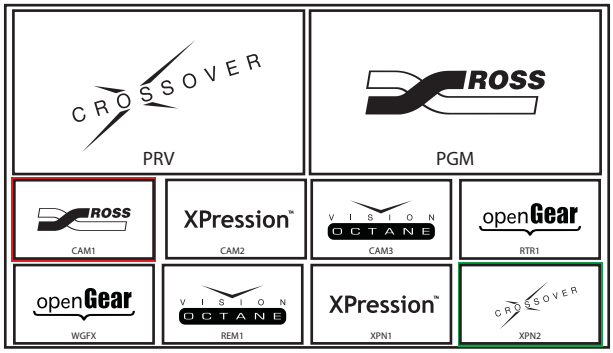
➤ Memory AI Recall Mode

CrossOver takes the guessing out of memory recalls by ensuring that a memory recall will not affect what is currently on-air. Memory AI uses the content of the memory to configure the Next Transition area and Preview bus for the background and keyers so that the next transition takes the same sources on-air that were on-air in the memory.

➤ Multi-Viewer

All CrossOver 12 Solo Live Production Switchers come standard with a broadcast-quality integrated multi-viewer. The multi-viewer allows you to view ten (10) video sources from a single output BNC. Any video source on the switcher, including Program, Preview, and Media-Store channels, can be assigned to any box on the multi-viewer. All boxes on the multi-viewer include mnemonic source names and red and green tallies.

Note: The Multi-Viewer output is only available on PGM2 and PV BNC outputs, and is in the same video format as the switcher is operating in. For example, if the switcher is operating in 1080i, the Multi-Viewer output is also 1080i.



Multi-Viewer Output

➤ General Purpose Interface

CrossOver 12 Solo is equipped with 24 GPI I/Os across three banks of 8 GPI I/Os. Each bank can be assigned as either an input or output.

The GPI inputs allow the switcher to interface with peripheral equipment such as editors. Each GPI input can be used to perform simple editing and switcher functions such as fade to black or an auto transition.

➤ Tally Outputs

The CrossOver 12 Solo Live Production Switcher has 8 pre-assigned tally relays. Tallies are fixed to the first 8 inputs in a one to one relationship.

➤ FlexDevice™ Driver Support

Individual FlexDevice drivers are uploaded to the switcher. Once a driver has been uploaded to the switcher, an instance of that driver is initialized and assigned to the port that the device is connected to. A single instance of a FlexDevice driver controls a single device. If you are connecting multiple devices of the same type to the switcher, you must activate multiple instances of that driver.

➤ System Manuals

CrossOver 12 Solo comes with a complete set of system documentation that includes a Users's Guide, and a Quick-Start poster.

➤ Technical Support

At Ross, we take pride in the quality of our products, but if problems occur, help is as close as the nearest telephone.

Our 24 Hour Hot Line service ensures you have access to technical expertise around the clock. After-sales service and technical support is provided directly by Ross personnel. During business hours (eastern standard time), technical support personnel are available by telephone any time. After hours and on weekends, a direct emergency technical support phone line is available. If the technical support personnel who is on call does not answer this line immediately, a voice message can be left and the call will be returned shortly. These people are available to react to any problem and to do whatever is necessary to ensure customer satisfaction.

➤ Repair and Warranty Policy

CrossOver 12 Solo is backed by a comprehensive one-year warranty on all components. CrossOver 12 Solo fader handles are covered with a lifetime warranty. For a more detailed description, please see our warranty document.

Standard Systems

Whether you have a demanding production environment, or a more modest one, selecting the Live Production Switcher that is right for you should not be a complicated task.

➤ CrossOver 12 Solo Multi-Definition Live Production Switcher

CPSSOLO-1012-001
12 Inputs

Do you have a production environment where space is at premium? Compact, easy to use, and powerful are all terms use to describe the CrossOver 12 Solo Multi-Definition Live Production Switcher.

The **CrossOver 12 Solo Multi-Definition Live Production Switcher** (**CPS-1012-001**) has 3 Keyers, 10 Crosspoint source buttons, 3 Aux Bus assign buttons, 6 Multi-Definition dedicated outputs, 6 Multi-Definition Serial Digital inputs, and a 2-axis positioner.

System Options

Options are typically ordered when the switcher is purchased. However, you can order options if your needs change in the future. All of our options can be easily installed in the field. You can take comfort in knowing that you can purchase options in the future and that installation at your site will be a smooth process.

➤ XPression™ Designer with RossLinq™ Media-Store Software

XDS0-0001-CPS
first option

XDS0-0001
additonal options

Note: The **XDS0-0001-CPS** option must be purchased at the same time as your CrossOver Live Production Switcher. Only one **XDS0-0001-CPS** option can be purchased per switcher. If you require additional licences, use the **XDS0-0001** option.

Seamlessly combine the creative power of the Ross Video XPression Designer software with the ease of use of the CrossOver Live Production Switcher. Create stunning still graphics using XPression Designer, and transfer them directly to an Animation-Store channel on the CrossOver Live Production Switcher using the RossLinq interface. Up to two (2) channels with dedicated alpha can be controlled from the XPression Software Client. This feature supports still images only.

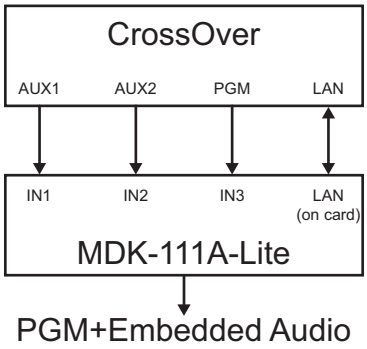
The XPression Designer requires a computer with a Microsoft® Windows XP® operating system and an NVIDIA® graphics card.

➤ Clean Embedded Audio Switching Hardware Package

CPS-CleanSwitch

This option adds the ability to perform transitions of video signals that include embedded audio. The video signal is routed from the CrossOver Live Production Switcher to an openGear MDK-111A-Lite card that performs the transitions under the control of the switcher. Both the MDK-111A-Lite, and the DFR-8321-C frame are included with this option.

This option requires two Aux Bus outputs on your CrossOver Live Production Switcher.



Clean Switch Flow Diagram

Note: Input frame-synchronizers and format converters will strip the audio from the video signal. Clean Switch requires video inputs that are in the same video format, and timing, as the switcher is operating in.

➤ CrossOver LiveEDL Package

CPS-LIVEEDL

This option adds the ability to copy Live Edit Decision List information from CrossOver to a non-linear editor via direct FTP or copy to USB.

This option includes the GearLite TSC-9902 Timecode to Serial Adapter to input LTC timecode to CrossOver and a software license to generate Live Edit Decision List files.

➤ Redundant Power

CPSSOLO-REDPSU-EXT

The redundant power supply option provides protection against AC power failure. It allows two external power supplies to receive power from independent power sources. Complete failure of one source, or power supply, will not affect the operation of the switcher in the slightest. If the main AC power fails, the switcher instantly draws power from the remaining source. The transition from one power source to the other is totally transparent and has no effect on the output of the switcher; a critical feature should one power source fail during an on-air broadcast.

➤ In-Desk or In-Rack Secure Mounting Kit

CPS-INDESK

This option provides two mounting options for the CrossOver 12 Solo. A versatile mounting bracket is attached to the bottom of the CrossOver control panel and provides a flange on either side of the control panel. This flange allows the CrossOver control panel to be mounted into a desk and screwed down, or mounted vertically into a rack frame.

The CrossOver 12 Solo requires at least 7RUs to mount it into a rack frame. This includes 1RU for cable bend relief.

➤ Analog I/O Pack for SD Signals

CPS-ANALOGIO1

Note: This option must be purchased at the same time as your CrossOver Live Production Switcher.

This option provides input and output support for analog video formats, such as RGB/YPbPr or YC/CVBS. A single (1) Ross GearLite DAC-9013 SDI to Analog Composite/Component Video Converter is provided for analog Program Out, and four (4) Ross GearLite ADC-9033 Analog Composite/Component/YC to ADI Video Converter for analog Inputs.

➤ Onsite Operational Training

SWR-OTR-1DAY
All Other Regions

Although CrossOver 12 Solo was designed to be as easy as possible to install and operate, training is highly recommended to ensure that the process of taking your Ross Video switcher to air is a smooth one.

Training is provided on the customer's equipment at their site. Expenses are extra, and billed at the completion of the visit. Ross Video cannot guarantee the availability of a local Trainer, as such, travel costs to all locations will be invoiced at cost. Two (2) days, or more, of training is recommended for multiple MLE systems. Four (4) weeks advanced scheduling notice is required. Additional days of training can be added with the **SWR-OTR-1DAY** option. Please quote 1×**SWR-OTR-1DAY** for each additional day of training required.

Customers cancellation or rescheduling of onsite services without seven (7) calendar days advanced notice will incur full invoice.

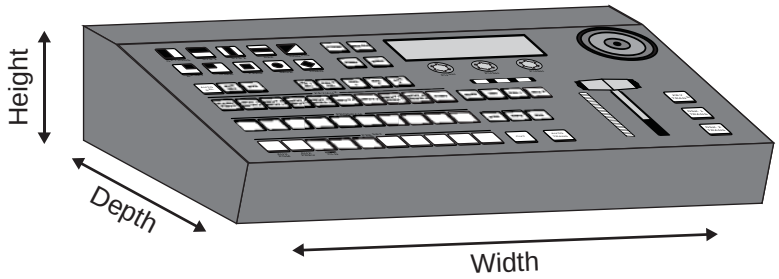
➤ Extended Warranty

CPS-999

This extends the standard one-year warranty on your CrossOver 12 Solo Live Production Switcher by one year. Additional years can be purchased if required.

Specifications

Physical Characteristics – CrossOver 12 Solo



	CrossOver 12 Solo
CrossOver 12 Solo Size	
Width	15.85” (40.3 cm)
Depth	10.64” (27.0 cm)
Height	3” (7.6 cm)
Height Above Desktop	4.81” (12.2 cm)
Panel Source Buttons	10
Desk Cutout Size	
Width	18” (45.7 cm)
Depth	11” (27.9 cm)
Connector Types	
External Link Port	RJ-45
AC Power	3-pin IEC
Video I/O	BNC-Type
Editor Port	D-Type, 9-pin, Female
USB Port	A-Type
Tally Ports	D-Type, 9-pin, Female
GPI I/O	D-Type, 25-pin, Female
Ethernet Port	RJ-45
Reference Out	BNC-Type

Power Rating – Tallies

	CrossOver 12 Solo
Input Voltage	24VAC (rms) / 40VDC
Maximum Current	170mA
Impedance	< 15 ohms

Power Consumption

	CrossOver 12 Solo
Consumption	24W 2A 12V
Input Voltage	100 - 120V~ 220 - 240V~ 47-63Hz 1.5A

Environmental Characteristics

	CrossOver 12 Solo
Ambient Temperature Range	0 - 35°C (32 - 95°F)
Control Panel Cooling	Power Supply

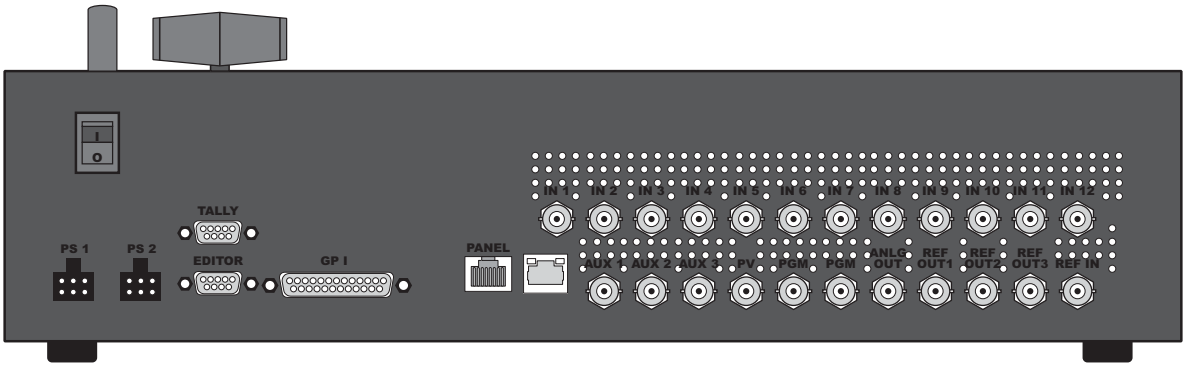
Video Characteristics

	CrossOver 12 Solo
Supported Video Formats	
480i/59.94 (SD 525)	SMPTE 125M, SMPTE 259M
576i/50 (SD 625)	ITU-R BT.601-5, SMPTE 259M
720p/59.94	SMPTE 296M, SMPTE 292M
720p/50	SMPTE 296M, SMPTE 292M
1080i/50, 1080i/59.94	SMPTE 274M, SMPTE 292M
• 10 bit 4:2:2 component digital video and key processing. • 4:3 and anamorphic 16:9 switchable aspect ratio where applicable. • Contract Ross Video for additional format compatibility.	
Video Inputs	
CrossOver 12 Solo — Number of Inputs	12
Equalization (using Belden 1694 cable)	> 180m @ 1.5Gb/s > 300m @ 270Mb/s
Impedance	75 ohm, terminating
Return Loss	> 20dB @ 1.5GHz
• All inputs are SMPTE-259M/292M serial digital non-looping. • Inputs can be used for either key or video. • The reference input is selectable, analog black for Standard Definition operation, and the recommended tri-level sync for High Definition operation.	

	CrossOver 12 Solo
Video Outputs	
Number of Outputs	6 SDI
Return Loss	> 16dB @ 1.5GHz
Rise and Fall Time	800ps +/- 10% (SD) 240ps +/- 10% (HD)
Signal Level	800mV +/- 10%
DC Offset	0 volts
Overshoot	< 8%
• All video outputs are 10-bit SMPTE-259M-C (SD Mode) or 10-bit SMPTE-292M serial digital (HD Mode). • EDH is inserted into all outputs and can be disabled. Aux Bus outputs do not have EDH insertion but do pass previously inserted EDH. (SD Video Mode). • Line CRCs are inserted into all outputs and can be disabled. Aux Bus outputs do not have line CRCs inserted but do pass previously inserted line CRCs. (HD Video Mode).	
Jitter	
Video Mode	
HD – Tri-Level Sync	Alignment (> 100KHz) < 0.2UI Timing (<10Hz) < 1.0UI
HD – Composite Reference	Performance not guaranteed with composite reference
SD – Tri-Level Sync	Alignment (> 1KHz) < 0.2UI Timing (<10Hz) < 0.2UI
SD – Composite Reference	Alignment (> 1KHz) < 0.2UI Timing (<10Hz) < 0.5UI
System Timing	
• All video inputs zero time relative to reference input, auto timing will correct for inputs out of time by up to +/- 0.25 line. • System delay approximately 500 pixels.	
System Reference	
Reference Format	**Video Format**
480i/59.94	480i/59.94, 480i 16:9/59.94, 1080i/59.94, 720p/59.94
576i/50	576i/50, 576i 16:9/50, 1080i/50, 720p/50
720p/50	720p/50
720p/59.94	720p/59.94
1080i/50	576i/50, 576i 16:9/50, 1080i/50, 720p/50
1080i/59.94	480i/59.94, 480i 16:9/59.94, 720p/59.94, 1080i/59.94

Note: Specifications are subject to change without notice.

Note: CrossOver 12 Solo switchers meet applicable world standards for safety, emissions, and immunity.



CrossOver 12 Solo — Rear View

Option Summary

CrossOver Live Production Switcher

	CrossOver 12 Solo
Live Production Switcher	
CrossOver 12 Solo Multi-Definition Live Production Switcher	CPSSOLO-1012-001
Additional Options	
XPression™ Designer with RossLinq™ Media Store Software[1]	XDS0-0001-CPS
Additional XPression™ Designer with RossLinq™ Media Store Software licences	XDS0-0001
Clean Embedded Audio Switching Hardware Package	CPS-CleanSwitch
CrossOver 12 Solo LiveEDL Package	CPS-LIVEEDL
Redundant Power	CPSSOLO-REDPSU-EXT
In-Desk or In-Rack Secure Mounting Kit	CPS-INDESK
Analog I/O Pack for SD Signals	CPS-ANALOGIO1
Onsite Operational Training	SWR-OTR-1DAY
Extended Warranty, 1 Year	CPS-999

1. Only one **XDS0-0001-CPS** option can be purchased per switcher.

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Request for Quotation

PAGE ____ of ____

Customer Information

Company _____

Contact Name _____

E-mail _____

Telephone (s) _____

Address _____

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Item #	Option Number	Option Name	Quantity

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